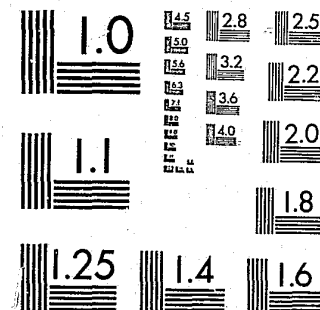


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4 MEASURING "FEAR OF CRIME"*

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MEASURING "FEAR OF CRIME"

INTRODUCTION

Methodologists have often observed that "...measurement problems constitute the key to the advancement of any science. Without adequate measurement, even the most eloquent theories must go untested" (Blalock, 1968:6). The process of developing such adequate measures involves three basic steps: (1) conceptualization, (2) operationalization, and (3) evaluation, with the latter step providing feedback for the modification of the other two. The principal road to conceptual development is a theoretical one. Although many constructs have popular or mass origins, their use in scientific research usually involves considerable clarification and specification. The second step, operationalization, involves the translation of theoretical language into a concrete process which results in the assignment of numbers to the object of interest. It should be noted that this process involves both a definition of the characteristic to be measured (step one) and a set of rules about how to measure it (cf. Kaplan, 1964:177). Once a concept has been translated into operational procedures, the adequacy of the results must be evaluated in terms of their ability to represent the theoretical concept. The usual criteria for evaluation involve estimates of reliability and validity. These evaluations may result in confirmation of the measure, a clarification of the concept, or a modification of the procedures designed to measure the concept. Thus, in the general sense, measurement requires a continuous interplay between both conceptual development and methodological sophistication.

Because judgments regarding the success or failure of crime prevention programs and decisions about future funding are often made on the basis of measures taken by evaluators, the above considerations are especially

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important to evaluation research. Of primary interest is the conclusion that a program shows no measurable effect. Such conclusions are a chronic problem in the field of crime prevention evaluation. The absence of an effect may be due to program failure, theory failure, or measurement failure (Green and Lewis, 1977; cf. Boruch and Gomez, 1977). The first concerns the fidelity of implementation for the program and is not the concern of this paper. Theory failure refers to the improper designation of the relevant program constructs. The researchers may conclude that there was no effect because the treatment and/or impact variables have been inadequately defined. This situation may result in the measurement of concepts irrelevant to the actual program impact. Measurement failure involves the situation in which the relevant concepts have been designated but inadequately operationalized. The very real consequences resulting from program evaluations (i.e., policy recommendations) emphasize the importance of the interplay between conceptualization and operationalization in applied settings.

In this paper, we address these issues as they relate to one area of community crime prevention programs. As defined by National Institute of Justice and HUD guidelines, local crime prevention efforts are charged with the dual goals of reducing both crime and the fear of crime (HUD, 1979; LEAA, 1978). Both goals are targeted as the primary focus of these programs, but the latter is usually relegated to an ancillary role by researchers. This is reflected in the differential effort devoted to the measurement of each concept, as discussed below. Our principal concerns rest with the conceptual and operational development of "fear of crime" measures. We maintain that the relative absence of operational consistency (standardized measures) and absence of evaluative data on the adequacy of such measures may be traced to conceptual ambiguity or an inattention to conceptual development.

Concerning the program goal of reduced crime, much effort has been devoted to improving measures of criminal incidents. Conceptually, at least, the incidence of crime is quite clear and involves acts which transgress legal proscriptions. Traditionally, crimes reported to the police were the only measures of crime rates. However, during the 1960's, the apparent increased crime rates, combined with the growing criticism of reported crime as a measure of amount of crime, produced a new means of operationalizing criminal incidents. The resulting strategy was to survey citizens about criminal offenses committed against them. These "victimization" surveys were originally developed for the President's Commission on Law Enforcement and Administration of Justice (see Biderman, et al., 1967; Reiss, 1967, Ennis, 1967) and have become a standard tool in the evaluation of crime prevention programs (cf. Kelling, et al., 1974; Fowler, et al., 1978; Schwartz, et al., 1975). The primary evaluations of measures resulting from these surveys have been reverse record checks (Kalish, 1974; LEAA, 1972; Sparks, et al., 1977), forward record checks (Schneider, 1977), and estimates of test/retest reliability (Hindelang, et al., 1978:230-233). These studies have demonstrated that victimization surveys produce reasonably valid and reliable estimates of victimization for most crimes, albeit at considerable cost. However, Skogan (1978) provides a detailed critique of this approach and indicates that there appears to be considerable room for improvement in these surveys, both conceptually and operationally.

In contrast to the extensive conceptual and methodological work directed at the measurement of criminal incidents, the area popularly known as fear of crime has received little attention. A wide variety of operational constructs have been employed as measures of this concept, resulting in little standardization and a patchwork knowledge of the area (see Baumer, 1978). We contend that this situation is an outcome of the conceptual ambiguity created by the

term "fear of crime." It is a very general popular and political concept employed to communicate a variety of ideas. As such, little convergence in operational measures is possible without considerable clarification. Below we first offer a critique of the concept and then suggest that the term be abandoned as a scientific construct in favor of what we view as three of the most critical components of the phenomena involved.

THE CONCEPTUAL PROBLEM

As suggested above, "fear of crime" has not been clearly defined in either popular or scientific usage. Close examination indicates that the terms has been used in reference to feelings, beliefs, perceptions, opinions, and behaviors regarding crime. Thus, one of the most fundamental questions that has not been adequately addressed in previous research is--what is meant, and should be meant, by the term "fear of crime?" As suggested earlier, researchers have all too often ignored this question as they move from popular conceptions to operational definitions. Again, the first fundamental step in measurement development is conceptualization.

Certainly, "fear of crime," as commonly measured, is not really fear of crime. Technically speaking, the term "fear of crime" should refer to an immediate, acute, emotional response to a particular stimulus event related to crime. As such, it has almost nothing in common with the fear-of-crime literature. Psychologists have studied emotions for many years, and anyone interested in the fear response is referred to this extensive literature (see Leventhal, 1974, for a complete review, and Plutchik, 1980, for recent advances). While theories of emotions tend to include the components of subjective awareness, autonomic/visceral reactions, and expressive behaviors, these reactions are usually conceptualized as following immediately from the

stimulus event and measurement is usually taken shortly thereafter. Obviously, the fear of crime literature focuses on more distant and, for some respondents, less tangible criminal events, with the additional assumption that the fear construct can be tapped using a self-report methodology.

If fear-of-crime studies have not measured fear, then what have they measured and how have researchers conceptualized the phenomena involved? Although it would be inappropriate to review the various measures of "fear of crime" at this point, the problems with previous conceptual approaches should be briefly mentioned to demonstrate the need for conceptual clarify in this topic area.

Recent theoretical and empirical efforts to move beyond the problem of labeling everything "fear" have been few in number and have yet to offer a convincing conceptualization of the phenomena (see Baumer, 1979, and Dubow, et al., 1978 for reviews). For example, Furstenberg (1971) distinguished between fear of crime and concern about crime as a social problem. While accepting this distinction, Fowler and Mangione (1974) questioned Furstenberg's operational definition of fear in terms of subjective risk of victimization. They proceeded to treat fear and perceived risk of victimization as separate concepts, whereby the former refers to an internal emotional state and the latter refers to perceived threat in the external environment. In any event, fear is the target concept in these early attempts of conceptualization.

Dubow, et al. (1978) have proposed a broader classification scheme that encompass values, judgments, and emotions about crimes. This scheme is consistent with Fowler and Mangione's distinction between risk (i.e., a judgment) and fear (i.e., an emotion). "Concern" about crime is treated as a value in this framework. The emphasis here is on making technical distinctions between types of perceptions (e.g., values vs. judgments).

While some conceptual progress is apparent, the state-of-the art leaves much to be desired. For example, is it useful to separate perceived risk of victimization from worry/fear about victimization? Although one is technically a judgment and the other is an emotion, they are both indicators of the perceived threat of victimization or perceived personal safety. In fact, Baumer's (1979) factor analysis revealed that "risk" and "worry" items loaded on the same factor. Thus, perhaps conceptual frameworks should not give as much attention to the type of response (e.g., judgment vs. emotion vs. values) but should attend more to the psychological significance of the response to the individual respondent (to be elaborated later). The empirical support for the distinction between risk and worry is presently lacking. However, there is general agreement that risk and worry can be distinguished from concern about crime as a social problem. The framework we will propose can account for these distinctions and others.

Previous conceptualizations of "fear of crime" have focused on the above-mentioned perceptions, but have not incorporated behavioral adaptations used to protect oneself or one's property. We argue that behavioral responses to crime not only deserve treatment in the same conceptual framework, but such responses may be the best indicators of "fear of crime" (in the generic sense), given that fear cannot be measured directly. Thus, behavioral adaptations will be included in our conceptualization.

When conceptualization is underdeveloped, measurement can be expected to show a parallel deficiency. Developing acceptable measure of ill-defined concepts is very difficult, if not impossible. Our main concern is that measures of the relevant constructs have not been adequately evaluated. As noted earlier, evaluation should focus on questions of validity and reliability. In terms of validity, there is little evidence of any evaluation other than

the examination of face validity. Of course, even face validity is problematic when researchers begin with the questionable assumption that diverse items are measuring fear of crime, rather than some other construct. A few factor-analytic strategies have been employed, but more work is needed. At present, these data suggest that (1) fear and risk are distinct from concern about crime (e.g., Baumer, 1979), and (2) personal safety (fear) is distinct from worry about one's home (Normoyle, 1980).

In terms of reliability, a few recently developed scales have been assessed for internal consistency (e.g., Baumer, 1980; Normoyle, 1980; Lavrakas, 1979), but only one study has examined test-retest reliability (Bielby and Berk, 1979). Both types of reliability have been acceptably high in the above-mentioned studies. Of course, reliability is a necessary but not a sufficient condition for validity. The dimensions of primary interest or the number of theoretical constructs involved remains confused.

TOWARD A RECONCEPTUALIZATION

At this point, we would like to share our latest thinking regarding the conceptualization of phenomena labeled "fear of crime," propose some new directions, and reinforce some recent trends in the literature.

First, we argue that the ambiguity and multiple usages of the term "fear of crime" suggest that it should be avoided whenever possible, as it only adds confusion to the topic area. More accurately, the literature to which this term refers focuses on the impact of crime on the individual. Fear, or better yet, perceived safety, is only one of many reactions to crime that has been measured, and as such, should be placed in the context of a larger conceptual framework. Moreover, these safety measures are probably tapping a general anxiety or worry about victimization, rather than fear.

We propose a relatively simple framework for conceptualizing the impact of crime on the individual. Essentially, the effects of crime can be measured in terms of:

- Citizens' perceived threat of individual victimization.
- Assessments of neighborhood crime problems.
- Self-reports of behavioral adaptations.

Furthermore, we propose that the stimulus events include both personal crimes and property crimes. This framework is illustrated in Table 1. This classification scheme suggests that there are at least six dimensions that can be identified when defining the impact of crime on the individual.

Insert Table 1 About Here.

There are a number of reasons ~~why~~ we have selected these particular dimensions, including the following: (1) These dimensions can incorporate the most relevant measures from previous research; (2) they pinpoint reactions which may be affected by crime prevention programs, and (3) they properly restrict the boundaries of study to the individual's perceptions of threat, perceptions of the local neighborhood, and crime-related behavioral adaptations.

Each of the three major domains will be briefly described, but first the basic distinctions between them should be noted. Earlier, when we spoke of the need to classify responses according to the psychological significance which they hold for the respondent (rather than their technical differences as judgments, feelings, behaviors, etc.), we were primarily referring to a distinction between the personal threat which crime poses to individual citizens and their perception of the local crime problem. Certainly, we can imagine people who

Table 1. Framework for Classifying Measures of the
Impact of Crime on Individuals*

Types of Crime	Perceived Threat of Individual Victimization	Item Focus Assessments of Neighborhood Crime Problems	Behavioral Adaptations
Personal	Estimates of personal safety on local streets	Perceived extent of local robbery as a problem	Reports of personal restriction of activities
Property	Worry about burglary	Perceived extent of burglary as a local problem	Self reports of locking behavior

*Cell entries contain examples of appropriate item content.

view the crime problem in their neighborhood as rather serious, but yet do not feel personally threatened by the possibility of victimization. Thus, assessments of the neighborhood crime problem should be treated as a separate dimension. Perceptions of the risk and worry about victimization are both considered assessments of threat, and protective behaviors are viewed as adaptations to that perceived threat of victimization. Certainly perceptions and behavioral adaptations are conceptually distinct, but each is very personal to the respondent. In summary, our simplified conceptual approach calls for an internal-external or self-environment dichotomy, involving the assessment of crime in relationship to oneself (perceived threat and behavioral adaptations) and crime in relationship to the neighborhood (assessment of local crime problem). The three primary variable domains identified in this reconceptualization are discussed below in relationship to previous measurement efforts.

PERCEIVED THREAT OF INDIVIDUAL VICTIMIZATION

Previous measures that fit under this category are generally of two types-- questions about perceived safety and questions about perceived risk of victimization. Questions about perceived safety are usually quite direct. For example, the LEAA city victimization surveys asked respondents "how safe do you feel, or would you feel, being out alone in your neighborhood at night?" As a substitute for "safe," other surveys have used the words, "afraid," "worried," "uneasy," "concerned" and other terms intended to directly measure fear of crime.

The typical approach to measuring perceived safety suffers from a number of limitations. Aside from a false sense of accuracy produced by their apparent face validity, usually only a single item is used. The reasons why we should be suspicious of single item measures are well documented (e.g.,

Schuman & Duncan, 1974). In addition, these items are often so direct that they probably elicit socially desirable responses (e.g., young males are unlikely to admit feeling "unsafe" or being "afraid"). Another limitation of the typical perceived safety items is that they focus almost exclusively on the personal crimes of assault and robbery, while worry about property crimes has been ignored. Normoyle's (1980) research stands as a recent exception to this rule, demonstrating that "fear" reactions to personal and property crimes are distinct dimensions.

The absence of standardization in previous safety questions is readily apparent. For example, existing items show wide variation in how the fear-producing stimulus is defined. Sometimes, the safety question is tied to specific crimes and/or specific situations, while other times, criminal situations are implicitly referenced or the question is directed at crime in general or the neighborhood in general.

The second major type of threat questions are those concerning risk of victimization. Respondents are often asked to estimate their chances of being victimized by specific crimes on a point scale. Again, the stimulus is not always specific crimes. Sometimes, the stimulus is "crime" in general, "this neighborhood," or a combination of crimes such as "robbed, threatened, beaten up, or anything of that sort." Property crimes are better represented among risk items than among safety items. However, risk items more frequently introduce conceptual problems by not always referring to the respondent's own risk of victimization. For example, respondents have been asked how likely it is that "a home or apartment" or "a person around here" will be victimized by crime. While some researchers have used these questions as an indirect "projective" technique for assessing the respondent's own perceived risk and safety, we are reluctant to endorse this approach because of its inherent interpretation problems.

As we begin to develop items that measure assessments of threat, we are following some basic guidelines which should carry us beyond previous measurement efforts. First, multi-item scales are essential. Second, an effort is being made to avoid questions which encourage socially desirable responses (e.g., "uneasy" and "concerned" may work better than "unsafe" or "afraid"). Third, the variations in stimulus situations evident in the literature must be controlled and, to some extent, standardized across items. We propose that risk and safety items be developed for specific property and personal crimes.

ASSESSMENT OF NEIGHBORHOOD CRIME PROBLEMS

The second major domain in the conceptual framework concerns assessments of neighborhood crime problems. Two types of assessments are most frequently requested: (1) Those where respondents judge the magnitude of the crime problem, either by estimating crime rates or selecting the best descriptive adjectives, and (2) those where respondents evaluate the importance of crime as a public concern or political priority. We maintain that the perceptions of the local or neighborhood crime problem should be included in any complete conceptualization of the impact of crime, as they provide information concerning both the objective and perceived threat to individual citizens. However, perceptions of the crime problem beyond the neighborhood level seem to have little relevance to the evaluation of local community crime prevention programs. Thus, the many questions asking respondents to estimate crime rates or describe the crime problem at the city, state, or national level should be excluded from this category. Similarly, comparisons of crime rates across different times or locations are useful here only if the neighborhood, or specific crimes within the neighborhood, are being assessed, or the time frame

has some special relationship to program implementation.

We must admit that setting the conceptual parameters for assessments of neighborhood crime problems is difficult, especially since previous questions cover a wide range of topics. For example, a number of existing items ask for an assessment of other people in the neighborhood, especially in terms of their attitudes about crime prevention, willingness to help other neighbors, or willingness to participate in the criminal justice system. On the one hand, it may be possible to develop a meaningful "trust" or "social cohesion" scale. On the other hand, these items are not central to a framework directed at the individual impact of crime.

Our own efforts tend to focus on assessments of specific crime problems within the neighborhood. In addition to estimated rates, a variety of adjectives can be used to describe crime and/or the neighborhood--e.g., "dangerous," "safe," "serious," "a problem," "concern," etc. Multi-item scales are being constructed. Some success in this area has been achieved and the semantic differential approach may prove useful in this topic area.

SELF-REPORTS OF BEHAVIORAL ADAPTATIONS

The third area of potential impact is crime-related protective behaviors. This category covers a very wide range of potential actions, varying in intensity, consequences, and the object of the actions. Although some research has been directed toward these actions, they typically have not been included as explicit goals in crime prevention programs. With some effort they could be incorporated into the evaluation of such programs and might serve as important impact measures.

Operationally, this area has been dominated by single item measures which vary in specificity. Some surveys have asked very global questions about crime-

related behaviors. For example, the national crime surveys asked respondents "in general have you limited or changed your activities because of crime?" Other researchers have asked similar questions but have included examples of potential behavior or followed affirmative responses with a request to be more specific.

By far the most popular approach has been to query respondents about specific actions. The objects of many of these questions are home protective behaviors. These include questions about the installation and use of security devices (e.g., locks, bars, lights, timers, and alarms), engraving valuables, obtaining insurance policies, and making agreements with neighbors to watch their house or apartment. Other surveys have asked about behaviors which might serve to protect the individual from "street" crimes. These include: Staying inside at night, not going out alone, avoiding certain areas or places, driving rather than walking or taking public transportation, or carrying a weapon. Generally these self-reported behaviors have been analyzed separately and relative frequencies compared.

Some attempt has been made to develop multi-item indices of behavioral adaptations. Lavrakas (1979) has reported on a property protection scale. This was a Guttman scale composed of four self-reported actions: Leaving lights on when away, asking a neighbor to watch the house or apartment, stopping deliveries, and notifying the police when leaving for more than a few days. Lavrakas found these items formed a unidimensional scale with a coefficient of reproducibility of .92 and a coefficient of scalability of .65. This suggests a promising direction for the study of home protective behaviors.

Another scale of personal protective behaviors has been reported by Baumer (1980). This additive index contained four items and was also unidimensional, with an alpha reliability of .70. The component behaviors included: going

out with an escort at night, driving rather than walking because of crime, taking protection along when going out alone, and avoiding certain areas. Each of these efforts suggests the viability of considering multi-item indices of behavioral adaptations.

Much work remains to be done if measurement in this area is to be more closely tied to program evaluation. Perhaps most important is the specification of program target behaviors and the direction of the anticipated effect. Behavioral targets must be selected which can be affected by programmatic intervention. Citizen actions which involve great expense or effort will probably not be sensitive to the types of intervention usually included in crime prevention programs. In addition the nature of the anticipated program impact must be specified. For example, some programs may aim at increasing certain behavior (e.g., home security) while attempting to decrease others (e.g., restriction of actions).

SUMMARY

The development and standardization of measures in the area described as "fear of crime" should begin where all good measurement begins--with sound conceptualization of the phenomena to be researched. As a whole, the fear of crime literature has given insufficient attention to this indispensable first step, and has focused almost exclusively on the correlates of a few items which have been evaluated only in terms of their face validity.

While better conceptualization should result in improved operationalization, only through empirical evaluation can the degree of correspondence between concepts and measures be adequately determined. We are currently assessing this correspondence in a NILECJ-funded project. Our reconceptualization of the topic area is being translated into multi-item scales, and these indices will be

subjected to various tests of validity and reliability. Hopefully, our efforts will produce a validated instrument that can be used by researchers and local program evaluators to assess the impact of crime on individual citizens.

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